

Q-Cycler

The Q-cycler is a high performance Thermal Cycler, controlled through an intuitive user interface running on a 6.4 inch colour touch screen.



The Q-Cycler's minimalist design and silent running hides a unit that is packed with power delivering maximum thermal performance. Four independent thermal engines ensure rapid transitions, excellent uniformity and near linear gradients. A full thermal cycling protocol can be set up on a single screen in seconds. The Q-Cycler is capable of running even the most complex thermal cycling protocols employing time and temperature increments, touchdown, gradient and hot start steps: its unique program wizard will even create the protocol for you. Every run is recorded in a comprehensive GLP file.

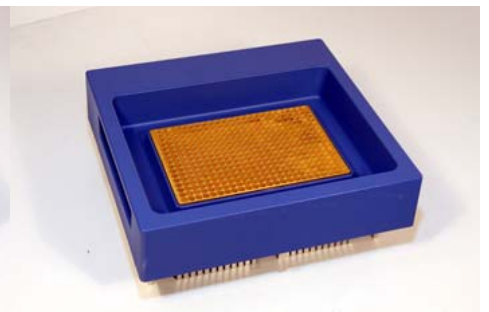
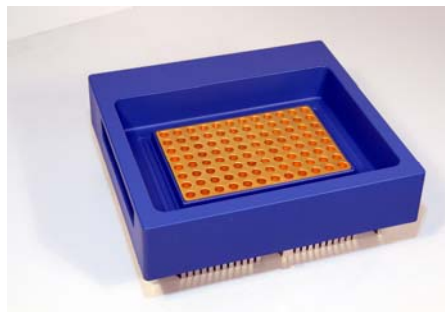
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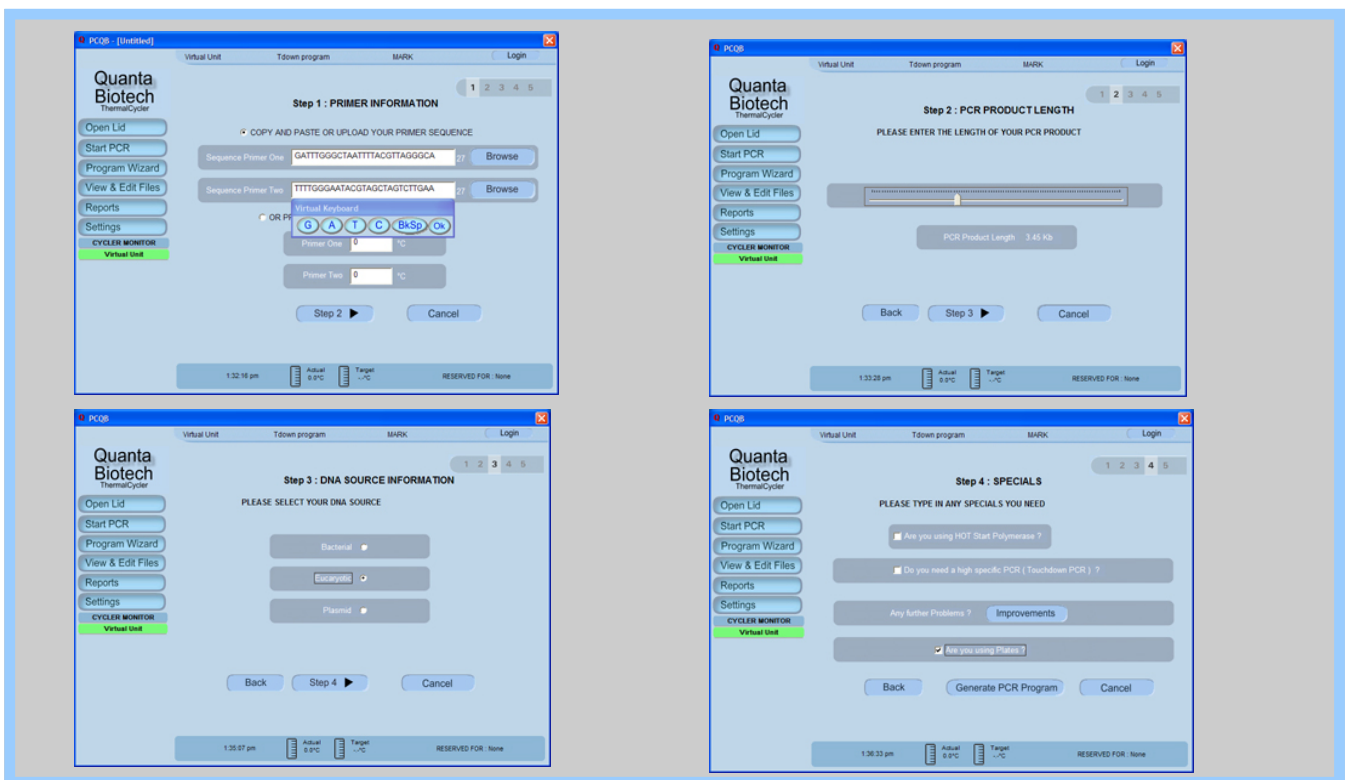
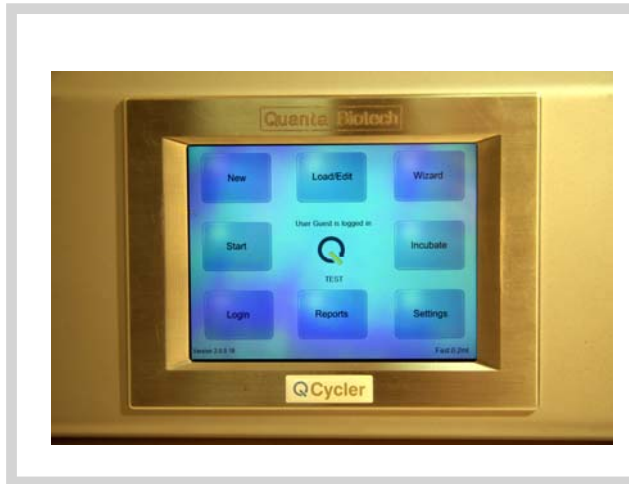
- Small, quiet, 96 well Gradient Thermal Cycler System
- 8 types of interchangeable thermal block
 - 96 well 0.2ml/ microplate
 - 48 well 0.5ml/ 48 well/0.2ml Combi
 - 384 well microplate
 - Micro array/slide
- Intuitive user interface for rapid programming and runs
- Ramp rate up to 5°C/s, uniformity better than $\pm 0.4^{\circ}\text{C}$
- Up to 30°C gradients
- Quad engine drive technology for superior performance
- Manual heated lid for universal tube/microplate pressure selection

Quanta Thermal Cycler System

Eight peltiers allow for precise sample control using Quanta's proprietary quad engine drive technology. Twelve independent temperatures for gradient optimisation experiments, add to the smooth running of this new improved cycler.

The Q-Cycler has 6 independent sensors to monitor and control every aspect of the sample environment, ensuring a high class of accuracy for every run.





The Q-Cycler's intuitive programming is accessed through its large colour touch screen interface. All functions are easily accessible from the main screen allowing programs to be created on a single screen in seconds. An intelligent onboard wizard will create optimised protocols automatically from primer sequence, template and amplicon details.

Large memory and storage provide the capacity for up to 10,000 protocols and full compatibility with USB memory sticks for protocol and GLP record storage provides personal security and further expands the versatility

A high power onboard computer continually monitors and plots a real time graph of every run the results of which are subsequently stored in comprehensive GLP files.

Q-Cycler Specifications

Temperature range of block, °C	4 to 99 with simulated tube and microplate control algorithms
Sample accuracy, °C	± 0.4 (20-99°C) ± 1 (4-20°C)
Sample homogeneity, °C	± 0.4 after 15 seconds (30-99°C)
Sample volume range, µl	5 to 100
Ramping rate, cooling, °C per second	up to 3.5
Ramping rate, heating, °C per second	up to 5
Sample overshoot, °C	< 1

Thermal blocks

Block materials	Nickel coated aluminium blocks with four rapid response temperature sensors Gold coated silver blocks with four rapid response temperature sensors
Traceability	Calibration using NIST traceable standards
Block supplied	96 x 0.2 ml; 48 x 0.2ml/48 x 0.5ml; 384 well or 4 x slide/microarray block. Gradient, non gradient and silver gradient blocks available.

User interfaces

Touch Screen	6.4 inch colour touch screen
Communication interfaces	1 x USB

Pressurised heated lid

Lid temperature	115-120°C
Lid pressure	Adjustable for tubes and microplates

Power and dimensions

Electronic power supply	100V-240V
Dimensions (w x d x h), mm	342x425x260
Weight , kg	12

Ordering Information

Q-cycler Server	7013001	Q-Cycler Server standard thermal cycler
	7013002	Q-Cycler Server gradient thermal cycler
	7013003	Q-Cycler Server ultra gradient thermal cycler

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